

Amendments to the Claims

Please cancel Claims 1-8 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 11, 12 and 14, and add new Claims 15-21 to read as follows.

Claims 1-8 (cancelled)

9. (Original) An ink jet recording apparatus of a serial type for performing recording by passing a recording material between a recording head and a platen disposed to face the recording head, and scanning, in a reciprocating manner, the recording head in a direction roughly orthogonal to a recording medium conveying direction, comprising:

dividing data of a main scanning direction of the recording head into a plurality of data blocks; and

executing recording on the recording medium by dividing the plurality of data blocks for a plurality of main scanning operations of the recording head,

wherein a sum total of lengths of the plurality of data blocks in the main scanning direction of the recording head is longer than a real recorded length of the recording medium in the main scanning direction of the recording head.

10. (Original) An ink jet recording apparatus according to claim 9, wherein a recording pixel and a mask pattern indicating an array of non-recording pixels are set in superposed region of the data blocks, and in a recording head main scanning direction superposed region of at least adjacent data blocks, means for allocating different mask patterns, and means for thinning recording data of each data block according to each mask pattern are provided.

11. (Currently amended) An ink jet recording apparatus for performing recording by scanning a recording head ~~to~~ by the same recording region ~~by~~ a plurality of times, and thinning recording data according to a different mask pattern ~~different~~ for each scanning, comprising:

means for dividing data of a main scanning direction of the recording head into a plurality of data blocks;

means for executing recording on the recording medium by dividing the plurality of data blocks for a plurality of main scanning operations of the recording head;

means ~~provided~~ for allocating different mask patterns ~~different~~ between a superposed region of adjacent data blocks in the main scanning direction of the recording head and a region ~~except for~~ other than the superposed region of the data blocks; and

means ~~provided~~ for thinning recording data for each region of each data block according to each mask pattern.

12. (Currently amended) An ink jet recording apparatus according to ~~any one of claims 9 to claim~~ claim 11, wherein the recording head ~~include~~ comprises a thermal energy generator for discharging ink.

13. (Original) An ink jet recording method for performing recording by passing a recording material between a recording head and a platen disposed to face the recording head, and scanning, in a reciprocating manner, the recording head in a direction roughly orthogonal to a recording medium conveying direction, comprising the steps of:

dividing data of a main scanning direction of the recording head into a plurality of data blocks; and

executing recording on the recording medium by dividing the plurality of data blocks for a plurality of main scanning operations of the recording head,

wherein a sum total of lengths of the plurality of data blocks in the main scanning direction of the recording head is longer than a real recorded length of the recording medium in the main scanning direction of the recording head.

14. (Currently amended) An ink jet recording method for performing recording by scanning a recording head ~~to~~ by the same recording region ~~by~~ a plurality of times, and thinning recording data according to a different mask pattern ~~different~~ for each scanning, comprising the steps of:

dividing data of a main scanning direction of the recording head into a plurality of data blocks;

executing recording on the recording medium by dividing the plurality of data blocks for a plurality of main scanning operations of the recording head;

allocating different mask patterns ~~different~~ between a superposed region of adjacent data blocks in the main scanning direction of the recording head and a region ~~except for other than~~ the superposed region of the data blocks; and

thinning recording data for each region of each data block according to each mask pattern.

15. (New) A recording apparatus comprising:

conveying means for conveying a recording medium in a predetermined conveying direction;

a recording head for recording on the recording medium conveyed by said conveying means; and

at least two rib rows for guiding the recording medium conveyed by said conveying means at a position facing said recording head and having a plurality of ribs arranged in a direction intersecting a conveying direction of the recording medium, ribs of one of said rib rows being arranged in a pattern different from a ribs of another of said rib rows,

wherein recording data is divided into a plurality of data blocks so that recording is performed on a leading end or a rear end of the recording medium, with respect to the conveying direction, by a plurality of recording operations performed by positioning the leading end or the rear end of the recording medium on each of said at least

two ribs rows, and the recording data is divided into the data blocks so that a recording operation based on each data block is not performed at a portion where the recording medium is superimposed with a rib and a portion corresponding to a vicinity thereof.

16. (New) A recording apparatus according to claim 15, wherein said recording head is a serial type ink jet recording head for performing recording by scanning in a main scan direction substantially perpendicular to the conveying direction to discharge ink.

17. (New) A recording apparatus according to claim 16, wherein a total sum of a length of recording images based on a data block in the main scan direction is longer than a length of a recording image actually recorded on the recording medium in the main scan direction.

18. (New) A recording apparatus according to claim 17, wherein the recording data is divided into the plurality of data blocks so that recording images based on different data blocks have an overlapped region, and when recording based on each data block, at the overlapped region, recording for remaining picture elements is performed except for picture elements having a different arrangement for each data block.

19. (New) An ink jet recording apparatus for recording on the same region of a recording medium by scanning a recording head plural times except for recording data of a different arrangement, said apparatus comprising:

conveying means for conveying the recording medium in a predetermined conveying direction;

a recording head for recording on the recording medium conveyed by said conveying means; and

at least two rib rows for guiding the recording medium conveyed by said conveying means at a position facing said recording head and having a plurality of ribs arranged in a direction intersecting a conveying direction of the recording medium, ribs of one of said rib rows being arranged in a pattern different from ribs of another of said rib rows,

wherein recording data is divided into a plurality of data blocks so that recording is performed on a leading end or a rear end of the recording medium, with respect to the conveying direction, by a plurality of recording operations performed by positioning the leading end or the rear end of the recording medium on each of said at least two rib rows, and the recording data is divided into the data blocks so that a recording operation based on each data block is not performed at a portion where the recording medium is superimposed with a rib and a portion corresponding to the vicinity thereof, and

wherein each data block has overlapped region recording data which is recording data for a region overlapping another data block, and recording is performed

except for recording data different from the overlapped recording data and the other recording data.

20. (New) An ink jet recording apparatus according to claim 9, wherein the recording head comprises a thermal energy generator for discharging ink.

21. (New) An ink jet recording apparatus according to claim 10, wherein the recording head comprises a thermal energy generator for discharging ink.